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**IEEE P802.15**  
**Wireless Personal Area Networks**

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Project	IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)	
Title	Task Group 4z meeting minutes for Nov 2019	
Date Submitted	15-Nov-2019	
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Re:	Meeting minutes	
Abstract	Task Group minutes	
Purpose	Document task group meeting	
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**IEEE Project 802**  
**Working Group 15, Task Group 4z**  
**Meeting Minutes: November 2019 Plenary**  
**Kona, Hawaii, USA**

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**Task Group Chair: Tim Harrington (Pro-ID Consulting, UWB Alliance)**

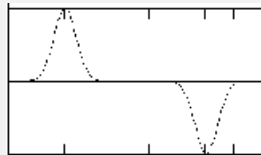
**Task Group Recording Secretary, Vice Chair: Benjamin A. Rolfe (Blind Creek Associates, UWB Alliance, NXP<sup>1</sup>)**

**Task Group Lead Technical Editor: Billy Verso (Decawave)**

**Task Group Comment Resolution Editor, Acting Vice Chair: Clint Chaplin (Samsung)**

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**Task Group 4z**



**Enhanced Impulse Radio**  
*Ultra-Wideband, the Technology*

*Where ever you go, there you are!<sup>2</sup>*

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<sup>1</sup> See <http://www.blindcreek.com/pages/affiliations.pdf> for affiliations by 802 activity

<sup>2</sup> Knowable with real-time sub-centimeter precision

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## Monday, Nov 11, 2019 (PM1)

### Called to Order

TG4z is called to order at 10:40 Local Time. Chair and Recording secretary are present. Opening Report is given. Chair presents Meeting slides Doc # 15-19-500-00:

<https://mentor.ieee.org/802.15/dcn/19/15-19-0500-00-004z-november-plenary-opening-slides-tg4z.pptx>

### **IEEE Patent and Meeting Conduct Presentation**

Chair reminds group of the requirements presented by the Working Group in 15-19-0504-00-0000:

<https://mentor.ieee.org/802.15/dcn/19/15-19-0504-00-0000-patent-copyright-policies.pptx>

The chair provided an opportunity for participants to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) of which the participant is personally aware and that may be essential for the use of that standard: **No responses were heard.**

The chair reviews the project scope, status and schedule.

### Agenda

Agenda: Chair presents proposed agenda document 15-19-0501-00.

<https://mentor.ieee.org/802.15/dcn/19/15-19-0501-00-004z-tg4z-november-2019-meeting-agenda.xlsx>

Discussion:

Motion to approve the agenda: Moved by Frank Leong, Second by Billy Verso.

Following no further discussion nor objection, agenda approved by unanimous consent.

### Prior Minutes

Approval of September meeting minutes and CRG meeting minutes, document

<https://mentor.ieee.org/802.15/dcn/19/15-19-0410-00-004z-sept-tg4z-minutes.pdf>

<https://mentor.ieee.org/802.15/dcn/19/15-19-0469-02-004z-crg-meeting-minutes-sept-nov.pdf>

Motion to approve prior minutes: Moved by Billy Verso, Second by Frank Leong.

Following neither discussion nor objection, approved by unanimous consent.

### **Reports and Discussion**

#### **MEC Review Comments**

Comments received from MEC are reviewed. Editorial direction to be applied by the TE.

#### **Comment Resolution Plan**

Received comments are reviewed (Doc # 15-19-0502-00).

<https://mentor.ieee.org/802.15/dcn/19/15-19-0502-00-004z-lb163-comments.xlsx>

Clint provides summary of comments and initial categorization is completed.

### **Comment Resolution**

Group works through comments.

### **Agenda Change**

Agenda is modified so that TG members may attend 802.19 opening and planned discussion on the coexistence process in PM2. The chair will recess until Tuesday, AM1.

Following neither discussion nor objection agenda is changed.

### **Recess**

Recess @ 15:30 local until AM1 Tuesday.

### **Tuesday, November 12, 2019 (AM1)**

Called to order @ 08:33 Local time. Chair and acting recording secretary are present.

Meeting reminder given (review scope and conduct).

### **Comment Resolution**

Comment resolution continues.

### **Recess**

Recess @ 10:00 local until AM2.

### **Tuesday, November 12, 2019 (AM2)**

Called to order @ 10:31 Local time. Chair and recording secretary are present.

Meeting reminder given (review scope and conduct).

**Comment Resolution**

Comment resolution continues.

**Recess**

Recess @ 12:17 local time until PM1.

**Tuesday, November 12, 2019 (PM1)**

Called to order 13:30 local. Chair and recording secretary are present.  
Meeting reminder given (review scope and conduct).

**Comment Resolution**

Comment resolutions continues. Results are captured in 15-19-0502-01.

<https://mentor.ieee.org/802.15/dcn/19/15-19-0502-01-004z-lb163-comments.xlsx>

**Motion to approve comment resolutions**

*Move to 802.15.4z TG approve the technical comment resolutions in document 15-19-0502-01 and directs the technical editor to apply.*

Moved by: Billy Verso

Second by: Clint Chaplin

Following neither discussion nor objection, approved by unanimous consent.

Technical editor will apply comments and expects to have a draft ready on Wednesday.

**Agenda Change**

To allow TE to prepare the draft, the chair will recess until Wednesday AM1.  
Following neither discussion nor objection agenda is changed.

**Recess**

Recess at 15:20 local.

**Wednesday, November 13, 2019 (AM1)**

Called to order 08:40 local. Chair and recording secretary are present.  
Meeting reminder given (review scope and conduct).

**Editor Status**

Editor has questions on comment resolutions. Following discussion revised resolutions are captured in 15-19-0502-03.

<https://mentor.ieee.org/802.15/dcn/19/15-19-0502-03-004z-lb163-comments.xlsx>

Editor to apply and present revised draft ASAP.

***Motion to approve revised comment resolutions***

*Move to 802.15.4z TG approve the technical comment resolutions in document 15-19-0502-03 and directs the technical editor to apply.*

Moved by: Billy Verso

Second by: Clint Chaplin

Following neither discussion nor objection, approved by unanimous consent.

**Recess**

Recess @ 09:50 local.

**Wednesday, November 13, 2019 (PM1)**

Called to order 13:30 local. Chair and recording secretary are present.

Meeting reminder given (review scope and conduct).

**Editor Status**

Draft is ready for recirculation ballot.

**Motions**

***CRG Formation Motion***

*Move that 802.15.4z TG approve the formation of a Comment Resolution Group (CRG) for the WG balloting of the P802.15.4z\_D5 with the following membership:*

*Ayman Naguib (Apple), Mingyu Lee (Samsung), Aditya Padaki(Samsung), Billy Verso (Decawave), Frank Leong (NXP), Tim Harrington (Chair) (Pro-ID), Ben Rolfe (Blind Creek), David Barras (3dB), Boris Danev (3dB), Brima Ibrahim(NXP), Paul Kettle (Decawave), Zheda Li (Samsung), Clint Chaplin (Samsung), Jochen Hammerschmidt (Apple)*

*The 802.15.4z CRG is authorized to approve comment resolutions, edit the draft according to the comment resolutions, and to approve the start of recirculation ballots of the revised draft on behalf of the 802.15 WG. Comment resolution on recirculation ballots between sessions will be conducted via reflector email, via teleconferences and face to face meeting(s) announced to the reflector as per the LMSC 802 WG P&P.*

Moved by Clint Chaplin, Second by Frank Leong.

Count: 19 yes, 0 no, 0 abstain

Motion carries

**Start of Letter Ballot Motion**

*Move that TG4z formally request that the 802.15 WG start a WG Letter Ballot requesting approval of CA document 15-18-0523-06 and document P802.15.4z-D5 and to forward document P802.15.4z-D5 to Standards Association ballot.*

Moved by Clint Chaplin, Second by Frank Leong

Count: 19 yes, 0 no, 0 abstain

Motion carries

**Request conditional approval for SA Ballot**

*Move that TG4z chair formally request that 802.15 WG move to approve the CSD ec-18-0085-00-ACSD-802-15-4z.docx, and CA document 15-18-0523-06 and document P802.15.4z-D5 to Standards Association ballot and requests conditional approval from the EC to submit P802.15.4z-D5 (or current revision) to Standards Association ballot.*

Moved: Billy Second: Tushar Shah

Count: 16 yes, 0 no, 0 abstain

**Agenda Change**

Chair, Vice Chair and Comment Resolution Editor to prepare recirculation documents and coordinate with WG Vice Chair to start recirculation ballot today, and work with WG Chair to prepare the EC package for conditional approval to begin SA ballot. The chair will recess until AM1 Thursday. We will meet on Thursday in case there are actions required prior to the WG Closing.

Following neither discussion nor objection agenda is changed.

**Recess**

Recess @ 14:30 local.

**Thursday, November 14, 2019 (AM1)**

Called to order at 09:05. Chair and recording secretary present. Meeting reminder given.

**Status and Discussion**

Recirculation ballot has started. EC package being prepared. Will recess until AM2 to review EC package.

**Recess**

Recess @ 09:15 local



**Thursday, November 14, 2019 (AM2)**

Called to order at 10:30. Chair and recording secretary present. Meeting reminder given.

**EC Package Review**

The EC package for requesting conditional approval is reviewed. Motions for the WG closing are presented. The agenda for the week is completed.

**Next Steps and CRG Schedule**

Review work plan and schedule.

We will have conference calls **starting Thursday November 28** at 3:00 PM Pacific Time for comment resolution of D5 of IEEE 802.15.4z needed. We will then continue to have calls for the recirculation and any subsequent recirculation's until the January 2020 Interim session as required.

The schedule for the meetings is as follows:

**Tuesdays 7:00 AM Pacific Time**

**Thursdays 3:00 PM Pacific Time**

**AOB**

None heard.

**Adjourn**

Adjourn @ 10:50 local

**Gratuitous Squirrel Reference**



**Figure 1: Not a Squirrel**